

Express Mail No. EV529827485US  
International Application No.: PCT/INT2003/000049  
International Filing Date: March 7, 2003  
Preliminary Amendment

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Previously Presented) A method of compression of image data of an image wherein each element is compared with a previous element and:

- (a) if they are both equal, a first value is recorded; and
- (b) if they are not both equal, a second value is recorded.

2. (Previously Presented) A method as claimed in claim 1, wherein each element is a pixel.

3. (Currently Amended) A method as claimed in claim 1 or claim 2, wherein the first value is a 1, and the second value is a 0.

4. (Currently Amended) A method as claimed in any one of claims claim 1 to 3, wherein the first and second values are stored in a bit plane.

5. (Previously Presented) A method as claimed in claim 4, wherein for a one-dimensional compression, a single bit plane is used to store the values.

6. (Previously Presented) A method as claimed in claim 4, wherein for a two-dimensional compression, comparison is in both horizontal and vertical directions, a separate bit plane being used for each direction.

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7. (Previously Presented) A method as claimed in claim 6, wherein the bit-planes for the horizontal and vertical directions are combined by binary addition to form a repetition coded compression bit-plane.

8. (Previously Presented) A method as claimed in claim 7, wherein the combining is by binary addition, only the second values being stored for lossless reconstruction of the image.

9. (Previously Presented) A method as claimed in claim 8, wherein the result of the combining is repetition coded compression data values, all other image data values being able to be reconstructed using the repetition coded compression data values, and the bit planes for the horizontal and vertical directions.

10. (Currently Amended) A method as claimed in ~~any one of claims~~<sup>claim</sup> 1 to 94, wherein storage in bit planes is in a matrix.

11. (Currently Amended) A method as claimed in ~~any one of claims~~<sup>claim</sup> 1 to 10, wherein a single mathematical operation is performed for each element.

12. (Previously Presented) A system for repetition coded compression comprising:

- (a) a camera for capturing at least one image and for supplying digital data;
- (b) a reshaping block for rearranging the digital data into a matrix of image data values;
- (c) a processor for receiving the matrix of image data values and compressing the image data values to form compressed data; and

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(d) a memory for storage of the compressed data.

13. (Previously Presented) A system as claimed in claim 12, wherein the camera is analog, an analog-to-digital converter being used to convert the analog image to provide the digital data.

14. (Previously Presented) A method for compression of an image comprising:

- (a) capturing the image;
- (b) converting the image into digital form to provide digital data;
- (c) reshaping the digital data into a digital data matrix;
- (d) encoding repetitions in the digital data matrix into a bit-plane index, and stored data values; and
- (e) storing the compressed data in a storage memory.

15. (Currently Amended) A method as claimed in claim 14, wherein there the bit-planes containing information regarding the repetitions along horizontal and vertical directions.

16. (Previously Presented) A method as claimed in claim 15, wherein there is further included combining the horizontal and vertical bit-planes by a binary addition operation to give a repetition coded compression bit-plane.

17. (Previously Presented) A method as claimed in claim 16, further including comparing the repetition coded compression bit-plane with the digital data matrix to obtain final repetition coded compression data values.

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18. (Previously Presented) A method as claimed in claim 17, further including storing and archiving the repetition coded compression data values along with the horizontal and vertical bit-planes.

19. (Currently Amended) A method as claimed in ~~any one of claims~~<sup>claim</sup> 14 to 18, wherein the compression is lossless.

20. (Currently Amended) A method as claimed in ~~any one of claims~~<sup>claim</sup> 14 to 18, further including compression by comparison with a threshold value to achieve lossy compression and a significantly higher compression ratio.

21. (Canceled)